TRIAX

HD Distribution

Multi-room distribution of HDMI, Ethernet, Control Signals and Power over Ethernet (PoE)

your ultimate connection

HD Distribution and Control Made Easy

As market leaders in the multimedia sector we offer the ultimate in HD connectivity and long distance signal management for professional installers.

5 Play and HDBaseT

Our new HD Distribution Range features the latest HD distribution technology with impressive features including 5Play and HDBaseT convergence.

The range includes 4x4, 4x8 and 8x8 5Play HDBaseT matrix solutions offering the ultimate in multi-room distribution of HDMI, Ethernet and Control Signals.

HDBaseT Lite

Our HDBaseT Lite range meets the needs of installers requiring only select HDBaseT functionality at distances less than 70m.

This solution compliments standard HDBaseT technology, enabling single cable transmission of uncompressed HD video, audio and various controls through a single Cat5e/ Cat6 cable.

The range includes a 4x4 matrix kit and point to point extender set.

Control using iPhone, iPad and iPod Touch

Our solutions can be controlled via iPhone, iPad and iPod Touch. Triax command sets can be downloaded from Demopad and are compatible with leading 3rd Party Control Systems.

Your one stop shop for AV installation requirements

Together with our point to point HDBaseT solution, HDMI distribution amplifiers, splitter, scaler, equaliser, analyser and complete range of cable and accessories, Triax is your essential ‘one stop shop’ for AV installation requirements.

What is HDBaseT and 5Play Convergence?

The growth of HD connectivity has resulted in consumers looking for better ways to provide point-to-point connectivity and multimedia distribution in home and commercial entertainment environments.

HDBaseT technology is the new digital standard for high-definition multimedia content, allowing users to get connected through an all-in-one solution.

HDBaseT technology provides users with an easy to install, easy to use, cost effective and consistent solution to connect displays in multiple locations with their entertainment devices (for example, digital video recorders (DVR), blu-ray disc players, games consoles, PCs and mobile devices) for in-home converged distribution of HD multimedia content. For instance, a DVR can be connected to several TVs throughout the home allowing users an independent yet fully compatible experience.

Consumer electronics devices (both domestic and commercial) currently require multiple cables connected to multiple connectors to enable 5Play convergence – uncompressed full HD digital video, audio, ethernet, power over cable and various control signals. This can prove costly for end users.

HDBaseT technology enables a single LAN cable to replace multiple cables and connectors. It is optimised for video application and can connect all the entertainment devices in home and commercial environments by providing 5Play convergence.

HDBaseT uses low-cost Cat 5e/6 cable which has high levels of reliability and can connect equipment up to 100m apart.

HDBaseT LAN-based technology makes it possible to cut the assortment of cables for audio, video, CE device connectors and even the power source. This form of networking, whether it is done point-to-point, by daisy chaining devices or through star topology, can be applied in both the consumer home and in B2B cases such as digital signage networking.

An All-in-One Solution – single cable / connector for multimedia distribution:

- No more cable clutter – fewer cables and less mess
- Distance no longer an issue – connect equipment up to 100m apart with Cat 6 cable. HDBaseT provides point-to-point connectivity and full- multimedia distribution with higher reliability, longer distance and lower cost
- Quality cable supports HD and 3D
- Power over cable - HDBaseT sends 100W of power simultaneously through the 5Play feature set
- Support for various controls while ensuring reliability and low latency
- Low cost installations - installation requires single, low-cost LAN cables with standard RJ-45 connectors, already installed in many homes

The compelling features of HDBaseT technology include:

- Uncompressed video/audio up to 10.2 Gbps
- Maximum cable length of 100m, including support of multiple hops, up to 8 x 100m
- Low cost standard Cat5e/6 LAN cable
- Utilizes a standard RJ-45 connector
- Supplies up to 100W of power Support for 100Mbps Ethernet
- Easy installation utilising existing in-wall Ethernet connectivity
- USB support
- Supports HDCP
- Networking support including extended-range daisy chain and star topologies

Video and audio:

HDBaseT supports TV and PC video formats including standard, enhanced, high-definition and 3D video, and also supports all standard audio formats.

HDBaseT delivers Full HD/3D and 2K/4K uncompressed video to a network of devices or as a point-to-point connection. Uncompressed content supports all video sources, including legacy products, accurately renders gaming graphics and features such as electronic program guides (EPGs), and does not degrade video quality or add latency.

100BaseT Ethernet:

HDBaseT supports 100Mb Ethernet capabilities, enabling televisions, hi-fi equipment, computers and other CE devices to communicate with each other and access multimedia content, including video, pictures and music stored around the house.

Power over cable:

Sending power over the same CAT5e/6 cable gives people the option to forego plugging devices into the wall outlet for power, allowing greater mobility. For example, this can be used to power our receiver units.

Various control signals:

HDBaseT delivers different types of control signals for different purposes, starting from CEC, to RS232/USB and IR that operate remote equipment even when located in a different room.

The Technology:

HDBaseT uses an asymmetric method, sending video, audio, Ethernet and controls from source to sink, but only 100Mb are transferred back (Ethernet and controls). Unlike conventional data communication which is a symmetrical application by nature, with required a bit error rate (BER) of at least 10 to the minus 12, the asymmetric nature of HDBaseT is based on an innovative DSP engine and an AFE (Application Front End) architecture.

A special line coding scheme was developed to provide a better transfer quality to some kinds of data (audio, controls, Ethernet) without the need to ‘pay’ the protecting overhead for the video content which consumes most of the bandwidth.

Compatible with leading 3rd Party Control Systems

ControlFX Home Control Solutions

CRESTRON

Control4 Better. Together.

AMX

HTX 1V

HDMI Transmitter HDBaseT 5Play 100m

Part No. 310001

Applications:

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control
- Used in conjunction with HDA 1x2S + HDA 1x8S

System requirements:

Input HDMI source equipment such as DVD/Blu-Ray player and output display with HDMI input socket.

Features:

- HDMI 1.4 with 3D, 4k x 2k support, HDCP & DVI Compliant
- Supports HDCP repeater and CEC function
- Simultaneously uncompressed data sending over a single 100m/328ft with CAT6 cable or 80m/262ft with CAT5e cable Uncompressed video 1080p, 60Hz, 48bits
- Audio support up to LCPM 7.1CH & Dolby TrueHD, DTS-HD 5PlayTM convergence: HDMI, LAN, POE & Control (IR & RS232) Bi-directional Internet
- Installation Friendly

Transmitter - Front View

Transmitter - Rear View

HRX 1V

HDMI Receiver HDBaseT 5Play

Part No. 310002

HTX 1V Transmitter	
Inputs	1 x HDMI, 1 x IR Extender, 1 x IR Blaster, 1 x RS-232, 1 x LAN
Output	1 x CAT5e/6
HRX 1V Receiver	
Inputs	1 x CAT5e/6, 1 x IR Extender, 1 x IR Blaster, 1 x LAN
Outputs	1 x HDMI, 1 x RS-232
General	
ESD Protection	Human Body Model: ± 8kV (air-gap discharge), ± 4kV (contact discharge)
IR Frequency	20~60 Hz
Dimensions (mm)	102(W) x 115(D) x 25(H)
Weight (g)	252 (TX), 256 (RX)
Chassis	Aluminium, Silver RAL 9007
Silkscreen Printing	Black
Power Consumption (W)	TX: 6, RX 8
Operating Temperature	0°C ~ 40°C/ 32° ~104°
Storage Temperature	-20°C ~ 60°C/ -4° ~140°
Relative Humidity	20~90% RH (non-condensing)

Receiver - Front View

Receiver - Rear View

ORX 1V

Receiver Outlet Plate with HDBaseT 5Play

Part No. 310005

The ORX 1V allows uncompressed HDMI signals and IP data to be transmitted over a Single CAT5e/6 cable. This solution has the added features of RS-232, 2-way IR control functionality and bi-directional internet over the same CAT5e/6 cable.

These combined HDMI and control signals can be transmitted up to lengths of 100m on Cat6 cable.

White colour matches outlet which offers full 5Play functionality and fits a standard 2 gang 35mm patress box making it a perfect solution for both new and retrofit installations.

Compatible with the complete range of Triax 4x4, 4x8 and 8x8 HDBaseT 5Play Matrixes and point to point solutions.

The ORX 1V outlet gives installers a choice of receiver styles depending on the installation.

Applications:

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control
- Used in conjunction with HDA 1x2S + HDA 1x8S

System requirements:

Output display with HDMI input socket

Features:

- HDMI 1.4 with 3D, 4k x 2k support, HDCP & DVI Compliant
- Supports HDCP repeater and CEC function
- Simultaneously uncompressed data sending over a single 100m/328ft with CAT6 cable or 80m/262ft with CAT5e cable Uncompressed video 1080p, 60Hz, 48bits
- Audio support up to LCPM 7.1CH & Dolby TrueHD, DTS-HD 5PlayTM convergence: HDMI, LAN, POE & Control (IR & RS232) Bi-directional Internet
- Installation Friendly

ORX 1V	
Inputs	1 x CAT5e/6, 1 x IR Extender, 1 x IR Blaster, 1 x LAN
Outputs	1 x HDMI, 1 x RS-232
General	
ESD Protection	Human Body Model: ± 8kV (air-gap discharge), ± 4kV (contact discharge)
IR Frequency	20~60 Hz
Chassis	PC White
Silkscreen Printing	Black
Power Consumption (W)	TX: 6, RX 8
Operating Temperature	0°C ~ 40°C/ 32° ~104°
Storage Temperature	-20°C ~ 60°C/ -4° ~140°
Relative Humidity	20~90% RH (non-condensing)

HTX 2V

HDMI Transmitter HDBaseT 5Play 100m

Part No. 310024

HDBT® 5Play™

Applications:

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control

System requirements:

Input HDMI source equipment such as DVD/Blu-Ray player and output display with HDMI input socket.

HDMI over CAT5e/6/7 receivers with industry CAT5e/6/7 cables

Features:

- HDMI 1.4 with 3D, 4k x 2k support, HDCP & DVI Compliant
- Supports HDCP repeater and CEC function
- HDMI Loop-through
- 2 x RJ45 Outputs
- Simultaneously uncompressed data sending over a single 100m/328ft with CAT6 cable or 80m/262ft with CAT5e cable Uncompressed video 1080p, 60Hz, 48bits
- Audio support up to LCPM 7.1CH & Dolby TrueHD, DTS-HD 5PlayTM convergence: HDMI, LAN, POE & Control (IR & RS232) Bi-directional Internet
- Installation Friendly

HTX 2V	
Video Bandwidth Input Port	300Mbps/10.2Gbps 1 x Female HDMI type A, 2 x 3.5mm RS232, 2 x IR Digital Eyes, 1 x LAN (Ethernet),1 x USB (Service Only)
Output Port	1 x HDMI, 2 x CAT5e/6/7, 2 x IR Emitters,
Resolution	Up to 4Kx2K
Power Supply	24V/2.7A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	145mm x 178mm x 30mm
Weight	528g
Chassis Material	Aluminium
Silkscreen Colour	Grey
ESD Protection	Human Body Model: +/- 8kV (air-gap discharge) : +/- 4kV (contact discharge)
Operating Temperature	0-40°C
Storage Temperature	-20˚C ~ 60˚C / -4˚F ~ 140˚F
Relative Humidity	20-90% RH (non-condensing)
Power Consumption (W)	64/TX (Main) / 56 RX (PoE)

HMX 8x8V

8-Source, 8 Sink Matrix

Part No. 310003

The HMX 8X8V is a 8 by 8 HDMI Matrix switch that converts the HDMI source signals to CAT5e/6/7.

With resolutions up to 1080p Full HD, 1920x1200@60Hz and multichannel digital audio supplied by up to eight High-definition sources to any of the eight CAT5e/6/7 outputs. It supports digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD. The HMX 8X8V also is compatible with 3D content and can be displayed on a 3DTV, a 3D Source will be required.

The HMX 8X8V allows eight HDMI sources to be independently controlled and distributed to eight Sink (TV's) displays up to 100 meters away along with IR signals and POE to power the Receivers and Ethernet (Internet).

HMX 8x8V	
Max. TMDS bandwidth	6.75GBps
Input Ports	8 x HDMI, 9 x IR Extender, 1 x RS-232, 1 x Mini USB B-type 9 (use for firmware upgrades only)
Output Ports	8 x CAT5e/6/7, 9 x IR Blaster
ESD Protection	Human Body Model: ±8kV (air gap discharge), ±4kV (contact discharge)
Power Supply	DC 24V 6.25 A (US/EU Standards, CE/FCC/UL Certified)
Dimensions (mm)	438 (W) x 255 (D) x 93 (H)
Weight (g)	4458
Chassis Material	Steel - RAL 9007 + RAL 7016
Silkscreen Colour	Anthracite RAL 7016
Operating Temperature	0-40°C
Storage Temperature	-20°C - 60°C
Relative Humidity	20-90% RH (non-condensing)
Power Consumption (W)	64/TX (Main) / 56 RX (PoE)

HDBT® 5Play™

Applications:

- HDMI System Controls
- Video/TV wall display and control
- Security surveillance and control
- Commercial Signage advertising, display and control
- Superstores, Supermarket Signage and CEC control

System Requirements:

- Input source equipment with HDMI connection
- CAT6 250MHz minimum is recommended for future proofing, backward compatible CAT5e cable
- Output display or audio receiver equipment with HDMI connection cables
- HRX 1V HDMI Receivers required 1 for each zone.

Features:

- HDMI, HDCP1.1 and DVI compliant
- Supports HDMI 3D features
- Supports resolutions to VGA ~ WUXGA and 480i~1080p follow by output display's EDID
- Supports extension up to 100 meters through CAT5e/6/7
- Supports POE (Power On Ethernet) TRIAX receivers only
- Supports HDMI input up to 15 meters with 8bits resolution or 10 meters with 12bits resolution
- Supports IR in/out from input and output side
- Supports RS-232, remote control and on panel control
- 2U size design, Desk mount or Rack mount
- Supports external and internal EDID setting
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby digital Plus and DTS-HD Master Audio transmission

Note: The PoE function is not designed for powering other non-family type devices.

HMX 4x8V

4-Source, 8 Sink Matrix

Part No. 310008

The HMX 4X8V is a 4 by 8 HDMI Matrix switch that converts the HDMI source signals to CAT5e/6/7.

With resolutions up to 1080p Full HD, 1920x1200@60Hz and multichannel digital audio supplied by up to four High-definition sources to any of the eight CAT5e/6/7 outputs. It supports digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD. The HMX 4X8V also is compatible with 3D content and can be displayed on a 3DTV, a 3D Source will be required.

The HMX 4X8V allows four HDMI sources to be independently controlled and distributed to eight Sink (TV's) displays up to 100 meters away along with IR signals and POE to power the Receivers and Ethernet (Internet).

HMX 4x8V	
Max. TMDS bandwidth	6.75GBps
Input Ports	4 x HDMI, 9 x IR Extender, 1 x RS-232, 1 x Mini USB B-type 9 (use for firmware upgrades only)
Output Ports	8 x CAT5e/6/7, 9 x IR Blaster
ESD Protection	Human Body Model: ±8kV (air gap discharge), ±4kV (contact discharge)
Power Supply	DC 24V 6.25 A (US/EU Standards, CE/FCC/UL Certified)
Dimensions (mm)	438 (W) x 255 (D) x 93 (H)
Weight (g)	4458
Chassis Material	Steel - RAL 9007 + RAL 7016
Silkscreen Colour	Anthracite RAL 7016
Operating Temperature	0-40°C
Storage Temperature	-20°C - 60°C
Relative Humidity	20-90% RH (non-condensing)
Power Consumption (W)	64/TX (Main) / 56 RX (PoE)

HDBT® 5Play™

Applications:

- HDMI System Controls
- Video/TV wall display and control
- Security surveillance and control
- Commercial Signage advertising, display and control
- Superstores, Supermarket Signage and CEC control

System Requirements:

- Input source equipment with HDMI connection
- CAT6 250MHz minimum is recommended for future proofing, backward compatible CAT5e cable
- Output display or audio receiver equipment with HDMI connection cables
- HRX 1V HDMI Receivers required 1 for each zone.

Features:

- HDMI, HDCP1.1 and DVI compliant
- Supports HDMI 3D features
- Supports resolutions to VGA ~ WUXGA and 480i~1080p follow by output display's EDID
- Supports extension up to 100 meters through CAT5e/6/7
- Supports POE (Power On Ethernet) TRIAX receivers only
- Supports HDMI input up to 15 meters with 8bits resolution or 10 meters with 12bits resolution
- Supports IR in/out from input and output side
- Supports RS-232, remote control and on panel control
- 2U size design, Desk mount or Rack mount
- Supports external and internal EDID setting
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby digital Plus and DTS-HD Master Audio transmission

Note: The PoE function is not designed for powering other non-family type devices.

HMX 4x4K

Matrix 4x4 Kit

Part No. 310004

The HMX 4X4K is a 4 by 4 HDMI Matrix switch that converts the HDMI source signals to CAT5e/6/7. With resolutions up to 1080p Full HD, 1920x1200@60Hz and multichannel digital audio supplied by up to four High-definition sources to any of the four CAT5e/6/7 outputs. It supports digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD.

The HMX 4X4K also is compatible with 3D content and can be displayed on a 3DTV, a 3D Source will be required. The HMX 4X4K allows four HDMI sources to be independently controlled and distributed to four Sink (TV's) displays up to 100 meters away along with IR signals and POE to power the Receivers and Ethernet (Internet).

Applications:

- HDMI System controls
- Video/TV wall display and control
- Security surveillance and control
- Commercial signage advertising, displaying and control
- Lecture room display and control
- Superstores, supermarkets signage and CEC control
- Residential Markets

HDBT® 5Play™

Features:

- HDMI, HDCP1.1 and DVI compliant
- Supports HDMI 3D features
- Supports resolutions to VGA ~ WUXGA and 480i~1080p follow by output display's EDID
- Supports extension up to 100 meters through CAT5e/6/7
- Supports POE (Power On Ethernet) TRIAX receivers only
- Supports HDMI input up to 15 meters with 8bits resolution or 10 meters with 12bits resolution
- Supports IR in/out from input and output side
- Supports RS-232, remote control and on panel control
- 1U size design, Desk mount or Rack mount
- Supports external and internal EDID setting
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby digital Plus and DTS-HD Master Audio transmission

Kit Contains:

- HMX 4x4K HDMI Matrix Switcher over CAT5e/6/7 x 1
- IR Emitter x 4
- 24V/6.25A DC adaptor x 1
- Remote control x 1
- HRX 1V HDMI Receivers (1 for each zone) x 4
- User manual

HMX 4x4K Specification	
Video Bandwidth	225MHz/6.75GBps
Input Ports	4 x HDMI, 5 x IR Digital Eyes, 1 x RS-232, 1 x Mini USB B-Type 9 (use for firmware upgrades only)
Output Ports	4 x CAT5e/6/7, 4 x IR Blaster
ESD Protection	Human Body Model: ±8kV (air gap discharge), ±4kV (contact discharge)
Power Supply	DC 24V 6.25 A (US/EU Standards, CE/FCC/UL Certified)

Cont.	
Dimensions (mm)	438 (W) x 255 (D) x 93 (H)
Weight (g)	3300g
Chassis Material	Steel - RAL 9007 + RAL 7016
Silkscreen Colour	Anthracite RAL 7016
Operating Temperature	0-40
Storage Temperature	-20 - 60
Relative Humidity	20-90% RH (non-condensing)
Power Consumption (W)	64/TX (Main) / 28 RX (PoE)

HMX 4x4L

Matrix 4x4 Kit

Part No. 310020

The HMX 4x4L is a 4 by 4 HDMI Matrix switch that converts the HDMI source signals to CAT5e/6/7. With resolutions up to 1080p Full HD, 1920x1200@60Hz and multichannel digital audio supplied by up to four high-definition sources to any of the four CAT5e/6/7 outputs. It supports digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD.

The HMX 4x4L is also compatible with 3D content and can be displayed on a 3DTV, a 3D source will be required. The HMX 4x4L allows four HDMI sources to be independently controlled and distributed to four sink (TV's) displays up to 70 metres away along with HDMI Extender over single CAT5e/6 incorporating IR Signals.

Applications:

- HDMI System controls
- Video/TV wall display and control
- Security surveillance and control
- Commercial signage advertising, displaying and control
- Lecture room display and control
- Superstores, supermarkets signage and CEC control
- Residential Markets

Features:

- HDMI, HDCP1.1 and DVI compliant
- Supports HDMI 3D features
- Supports resolutions to VGA - WUXGA and 480i - 1080p follow by output display's EDID
- Supports extension up to 70 metres through CAT5e/6/7
- Supports HDMI input up to 15 metres with 8 bits resolution or 10 metres with 12 bits resolution
- Supports IR in/out from input and output side
- Supports RS-232, remote control and on panel control
- 1U size design, Desk mount or rack mount
- Supports external and internal EDID setting
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby digital plus and DTS-HD Master Audio transmission

Kit Contains:

- HMX 4x4L Matrix Switch x 1
- IR Emitter x 4
- DC adaptors x 5
- USB Power Cables x 4
- Remote control x 1
- Receivers with digital eyes x 4
- User manual

HMX 4x4L Specification	
Video Bandwidth	225MHz/6.75GBps
Input Ports	4 x HDMI, 5 x IR Digital Eyes, 1 x RS-232, 1 x Mini USB B-Type 9 (use for firmware upgrades only)
Output Ports	4 x CAT5e/6/7, 4 x IR Blaster
ESD Protection	Human Body Model: ±8kV (air gap discharge), ±4kV (contact discharge)
Power Supply	DC 24V 2.7 A (US/EU Standards, CE/FCC/UL Certified)

Cont.	
Dimensions (mm)	438 (W) x 255 (D) x 93 (H)
Weight (g)	3300g
Chassis Material	Steel - RAL 7035
Silkscreen Colour	Black
Operating Temperature	0-40
Storage Temperature	-20 - 60
Relative Humidity	20-90% RH (non-condensing)
Power Consumption (W)	31W

HES Lite

TX and RX Extender Set

Part No. 310021

The HDMI/DVI over single CAT5e/6 with IR &RS-232 transmitter and receiver set can make your home or office set-up more efficient and easy to use.

Uncompressed video and audio can be transmitted up to 60 meters with the added benefit of controls through the built-in IR ports (HDMI only). This family design of HDBaseT™ technology allows a full usage of HDMI and controls over CAT5e/6 cable.

Applications:

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control for projector
- Classroom display and control

Kit Contains:

- (TX) HDMI/DVI to CAT5e/6 with IR x 1
- (RX) CAT5e/6 to HDMI with IR x 1
- Emitter x 1 / IR Digital Eye x 1 / USB Power Cable x 1
- 5V 2.6A DC Power Adaptor x 2 • User Manual

Features:

- HDMI 1.4 with 3D, 4K x 2K support, HDCP and DVI compliant
- Complies with the HDBaseT-Lite class
- Enables HDMI 1.4 (including HDCP), over a single CAT5e/6 up to 60m
- Full HD support: 1080p@60Hz@36 b/pixels, 3D over 60m and 4Kx2K over 40m with CAT5e/6 cable
- HDMI input up to 15 meters with 8bits resolution or 10 meters with 12bits resolution
- HDMI output up to 15 meters with 8/12bits resolution
- Supports HDCP repeater and CEC bypass
- Supports uncompressed video 1080p, 60Hz, 36bits
- Audio supports LPCM 7.1CH, Dolby TrueHD, Dolby digital Plus and DTS-HD Mater Audio transmission
- Compact size with stylish design

HES Lite Specification	
Video Bandwidth	300MHz/9Gbps
Transmitter	
Input	1 x HDMI
Output	1 x RJ45, 1 x IR Blaster
Receiver	
Input	1 x RJ45, 1 x IR Extender
Output	1 x HDMI
ESD Protection	Human Body Model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Power Supply	2 x 5V/2.6A DC for Transmitter and Receiver (US/EU standards, CE/FCC/UL certified)

Cont.	
Dimensions	55mm(W) x 82mm(D) x 22.5mm(H)/each/HDMI 60mm(W) x 82mm(D) x 22.5mm(H)/each/DVI
Weight	56g/TX, 64g/RX (HDMI), /TX, /RX (DVI)
Chassis Material	Plastic
Silkscreen Colour	White
Operating Temperature	0 ~ 40 / 32 ~ 104
Storage Temperature	-20 ~ 60 / -4 ~ 104
Relative Humidity	20 ~ 90% RH (non-condensing)
Power Consumption	3W/TX, 5.5W/RX (HDMI) 3W/TX, 5W/RX (DVI)

HDA 1x2S

HDMI-HDMI Distribution Amplifier

Part No. 310006

The Triax HDA HDMI Distribution Amplifier Series is an advanced solution for distributing HDMI Source signals to either 2 or 8 Sink devices.

Each product in the Triax range is compatible to v1.3 HDMI specifications, a cutting edge technology which defines the support of the transfer of Deep Colour (10-bit and 12-bit) video and new lossless compressed (LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) digital audio, with a high bandwidth up to 225MHz (6.75Gbps).

Besides splitting and distributing, the HDA Series also provides signal amplification and equalization of audio and Video from Input to Output.

Features:

- v1.3 HDMI, HDCP 1.1 and DVI 1.0 compliant.
- Supports 'Deep Colour' (10 and 12 bit).
- One HDMI source can connect to two or eight HDMI displays simultaneously.
- HDCP keysets allows each output to work independently when connecting to a HDMI display.
- Supports DVI source and DVI display by using HDMI to/from DVI adaptor cable.
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmissions (32-192kHz F/s sample rate).
- Supports a wide range of PC and HDTV resolutions from VGA to UXGA and 480i to 1080p.
- Supports EDID functionality.
- Note: The detection priority is v1.3 HDMI > v1.2 HDMI > DVI On output1
- Supports CEC bypass

HDA 1x2S - Front Panel

HDA 1x2S - Rear Panel

HDA 1x8S

HDMI-HDMI Distribution Amplifier

Part No. 310007

HDA 1 x 2S	
Input Port	1 x HDMI Female Port (Type A)
HDCP Version	V1.1
Output Port	2 x HDMI Female Port (Type A)
HDMI Specification	V1.3
Frequency bandwidth	2.25Gbps (single link)
Power Supply	5V/ 1.2A DC (US/EU standards, CE/FCC/UL Certified)
Dimensions (mm)	100(W) x 147(D) x 25(H)
Weight (g)	300
Chassis Colour	Anthracite RAL 7016
Chassis Material	Metal
Operating Temperature	Operating from 0°C - 40°C

HDA 1 x 8S	
Input Port	1 x HDMI Female Port (Type A)
HDCP Version	V1.1
Output Port	8 x HDMI Female Port (Type A)
HDMI Specification	V1.3
Frequency bandwidth	2.25Gbps (single link)
Power Supply	5VDC/2.6A (US/EU standards, CE/FCC/UL Certified)
Dimensions (mm)	240(W) x 103(D) x 24(H)
Weight (g)	1000
Chassis Colour	Anthracite RAL 7016
Chassis Material	Metal
Operating Temperature	Operating from 0°C - 40°C

HDA 1x8S - Front Panel

HDA 1x8S - Rear Panel

HMX Scaler

HDMI-HDMI Resolution Scaler

Part No. 310010

The HMX Scaler is designed to display your HD pictures on a HDTV. It can upscale the HDMI input sources to HDMI output for a wide-range of HD resolutions (supported resolutions: XGA/UXGA/720p/1080p/1366 x 768/1440 x 900/1400 x 1050).

The unit provides the user with a variety of output resolutions in order to give you the best picture quality. Move over, with built-in hot-key OSD function and display it helps the user to view and select the desired resolution instantly.

HMX Scaler Specifications	
TMDS Clock Frequency	225MHz
Input Port	1 x HDMI
Output Port	1 x HDMI
Power Supply	5V/1A DC (US/EU standards, CE/FCC/UL Certified)
Dimensions	114(W) x 65(D) x 26(H)
Weight (g)	78
Chassis Material	Plastic
Silkscreen Colour	Black
Power Consumption	2.7W
Operating Temperature	0 -40 / 32 - 104
Storage Temperature	-20 - 60 / -4 - 140
Relative Humidity	20-90% RH (non-condensing)

Applications:

- PC timing convert into HD timing
- HD timing convert into PC timing

Package Contents:

- HDMI to HDMI Scaler box
- 5V DC Power adaptor
- User manual

System Requirements:

- Input source equipment and output HD display with HDMI connection cables

Features:

- HDMI, HDCP1.1 and DVI compliantOutput supports HDMI 1.2, HDCP 1.1 and DVI 1.0 compliant
- HDCP compliant
- Input supports HDMI v1.3 8/10/12-bit deep colour mode
- Supports HD resolution input: VGA~WSXGA, WUXGA@60 (Reduce Blanking) / 1366X768 / 1440X900/ 1400X1050/480p@60, 720p@60,1080p@60
- Fast switch hot key from 720p to 1080p / 1280 x 800 / 1366 x 768 / 1920 x 1200 (RB)
- Auto –Detection and Hot plug
- Interlaced to progressive conversion with various picture display supplement

HDA 1EQ

HDMI-HDMI Equaliser

Part No. 310011

The HDA Equaliser is designed to transmit digital audio and video signals and extend the distance that these signals can travel by equalizing and re-clocking the CDR (Clock Data Recovery).

The HDA 1EQ can transmit and receive 2.25Gbps band-width rate with video resolution up to 1080p@60Hz. The HDA 1EQ is line powered by the source equipment and draws less than 2W.

HDA 1EQ Specifications	
Frequency Bandwidth	2.25Gbps (single link)
Input Port	1 x HDMI (female type A)
Output Port	1 x HDMI (female type A)
Output Resolution	HD: 480i~1080p@24/50/60Hz PC: VGA~UXGA
Input Cable Distance	15m / 8 or 12 bits
ESD Protection	Human Body Model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Dimensions (mm)	65 (W) x 24 (D) x 10 (H)
Weight (g)	30
Chassis Material	Aluminium, Silver RAL 9007
Silkscreen Colour	Black
Power Consumption	20W (max)
Operating Temperature	0 -40 / 32 - 104
Storage Temperature	-20 - 60 / -4 - 140
Relative Humidity	20-90% RH (non-condensing)

Applications:

- Extending HDMI Cables
- HDMI Cascading

Package Contents:

- HDA 1EQ
- User manual

System Requirements:

- Input HDMI source equipment such as DVD/Blu-Ray player and output display with HDMI input socket.

Features:

- Built-in TMDS equaliser and CDR for long cable support
- Support video resolutions upto 1080p@60Hz
- Capable of transmitting and receiving 2.25Gbps data
- Line powered from source equipment <2W power consumption
- Installation friendly

HMX Analyser

3D HDMI Mini Analyser

Part No. 310012

The 3D mini HDMI Analyzer is a tool for checking both source and display devices. With touch button control and built-in OLED (Organic Light Emitting Diode) it can show status of both input and output device. The major purpose is to analyze input source info-frame and output sink EDID. Another purpose is to use built-in pattern to test output device.

Applications:

- Apparatus testing
- Equipment adjustment
- EDID checking
- HDCP verification
- Production testing
- R&D design

System Requirements:

HDMI input port connected to the source/HDMI system with HDMI port and output connected to the display/HDMI system with HDMI port.

Features:

- Provides 25 timings, 6 patterns and 1 pattern for 3D timing
- Deep colour video (up to 12 bits, 1080p@60Hz)
- Supports input signal bypass, digital video formats in ‘Deep Colour’ Mode at up to 36 bits (12 bit/colour) and new lossless compressed digital audio (Dolby TrueHD, Dolby Digital Plus and DTS-HD master Audio)
- Supports internal pattern audio LPCM 2CH 48/96/192KHz, LPCM 5.1CH 48/96KHz, LPCM 7.1CH 48/96KHz.
- Analyse the input source info-frame and output sink EDID information
- Touch button control function
- OLED shows Input/Output timing information
- Support ARC (Audio Return Channel) following HDMI v1.4 specifications
- Supports ‘Deep Colour’ (8/10/12-bit) output
- Supports HDCP repeater function and compliant with HDCP
- Supports CEC bypass

HSS 3x1

HDMI Source Selector

Part No. 310015

The HSS 3x1 is a HDMI Source Selector which has 3 inputs and a single output with “IR” control. The device is a Mini HDMI Selector (Model HSS 3x1) is a high performance HDMI switcher. It allows you to select individual sources up to 3 and feed them into a TV or monitor that only has 1 or 2 HDMI inputs.

By simply pressing the button on the device or RCY you can select the desired source to be displayed on your HDTV.

Features:

- Share three digital video sources with audio to one high definition TV.
- High-Definition Automatic Sensing automatically switches to the active port.
- Compliant to HDMI1.1, 1.2a, 1.3a, HDCP 1.1 and DVI 1.0
- Supports high resolution inputs:
  PC: VGA, SVGA, SXVGA (1280x1024)
  UXGA (1600×1200, 1920x1200)
  HDTV: 480p, 720p, 1080i and 1080p
  HDCP compliant.
- Eliminates the need to disconnect and reconnect the required HD Source.
- Input and Output cable length: Up to 10 and 20Meter @1080p Max. (HDMI cable OD 26AWG).
- Plug-n-Play, no additional software required

Specifications:

- High Data Rate: UP To 2.5 Gbps.
- Signal Link Range: up to 1080p / 1920×1200.
- Input Connector: 3 × HDMI female (type A)
- Output Connector: 1 × HDMI female (type A)
- Select mode: automatic or manual (three HDMI sources)
- Dimension : 66(W) × 66(L) × 17.5(H) mm

Accessories:

- HDMI Source Selector HSS 3x1 1 pc
- Remote Control 1 pc
- IR Extender Eye 1 pc
- User manual 1 pc

Digital Link Eye

3.5mm Stereo Jack

Part No. 310014

The Digital Link Eye is positioned near the TV ‘Sink device’ for it to accept the IR commands from the Source equipment’s RCU. These command signals are sent back through the CAT5e/CAT6 cabling infrastructure.

Digital Link Eye	
Supply Input Voltage	2.5 to 5.5 VDC
Input Carrier Frequency	30 to 60 KHz
IR Output Signal Type	Modulated Output Signal
Peak Wave Length (p)	940nm
IR Receiver Angle	± 45 deg
Cable Dimensions (L)	2M
Connector Type	3.5mm 3 Pole Stereo Plug Straight
Operating Temperature	-25 to +85
IR Receiver Sensor Dims (LxWxH)	33x24x19 (mm)
Weight	40g

Emitter

IR 1.5m Single IR Emitter

Part No. 310013

Once the ‘IR’ command information is received it is relayed from the cabling infrastructure and re-coded via the Emitter fixed to the front of the Source equipment to control it.

IR Emitter	
Connector	3.5mm Plug
Peak Wavelength	940 nm
View Angle	40 deg
Weight	9g
IR Lens Dimensions (LxWxH)	12.5 x 12.5 x 5mm
Cable Length (L)	1.5m

CAT6 UTP Cable

250 MHz Cable

Part No. See Table

CAT6 UTP Cable		
CAT6 UTP / 250 MHz Indoor PVC Cable	Standard Grey 305m Pully Box	Part No. 155001
CAT6 UTP / 250 MHz LSZH Cable	Purple Sheath 305m Pully Box	Part No. 155002
CAT6 UTP / 250MHz External PE Cable	Black 100m Wooden Reel	Part No. 155003
CAT6 UTP / 250MHz External PE Cable	Brown 100m Wooden Reel	Part No. 155004

Accessories

6.0mm Cable Clips

CAT6 UTP Cable	
6.0mm Black Clips for 155003 Black CAT6 Cable	Part No. 370023
6.0mm Brown Clips for 155004 Brown CAT6 Cable	Part No. 370024

CAT6 Cable Tester

Master Unit and Remote Receiving Unit

Part No. 157010

The CAT5e/6 cable tester provides a simple method of checking the correct pin configuration of 10Base-T cable, 10Base-2 cable, RJ45/RJ11 modular cables, 258A, TIA-568A/568B and Token Ring cables.

It comprises of a Master Unit and a separate Remote Receiving Unit. The LED indicators on the master and remote units can then be used to determine the status of the cable under test. The Master unit can be used on its own, e.g. for testing short cables at one location, or with the Remote Unit for testing longer cables or pre-installed cables.

As the Remote Receiver is separate to the Master Unit, it does not matter whether the cable under test is long, short, on a wall plate or patch panel. The tester can be used to check for cable continuity, open circuit, short circuit or a cross connected cable.

Features:

- Versatile and simple to use
- Can be used to check the pin configuration of 10Base-T, 10Base-2 Ethernet cable, RJ45 /RJ11 modular cables, 258A, TIA-568A/568B and Token Ring cable
- Easy to read LED indicators on the Master and Remote Units showing the cable status
- Can be used to verify cable continuity, open circuit, short circuit and cross wiring
- The separate remote receiving unit can be used to test cables whether long, short on a wall plate or patch panel
- Can be used to test grounding
- Selectable auto or manual scan

LAN Network Tester

Testing and Problem Solving Installations

Part No. 157011

- Help prevent and solve network cable installation problems
- Check telephony and data cable installations
- Carry out a number of tests such as cable connection sequence, length, user jumper, cable connection continuity and can detect open circuits, short circuits, jumper or cross-talk interference
- Reduce cable installation cost and save cable installation time

Features:

- Only requires one person to complete cable continuity checks
- Checks for wiring errors in CAT 5e / 6 cable, coaxial cable and telephone lines
- Errors such as open circuit, short circuit, jumper wire, reverse connection or cross-talk interference can be detected
- Locates the wiring or connection error
- Measures the cable length and estimates the distance to the open circuit or short circuit fault
- Dynamically calibrates cable length and carries out cable length measurement to an accuracy of 97%
- Simple and easy to use. The large LCD screen clearly displays the test results
- Portable unit with long battery life
- Automatically switches off if left unused for 30 minutes
- Measures length and pair with or without far-end recogniser
- Locates cables. There can be up to 8 far-end passive test jacks (ID No: ID 1-ID8)
- Self-checking function and automatic compensation for any change in battery capacity or ambient temperature.

LAN Cable Identifier

Identifier and Wire Tracker

Part No. 157012

LAN Cable Identifier Specifications	
Product Name	LAN Cable Identifier
Part Number	157012
Power Supply	DC, 9V Battery
Max Working Current	Emitter Unit ≤10mA Receiver Unit ≤30mA
Signal Transmission Format	Multi-Frequency Impulse
Electrical Signal Output Status	8V p-p
Signal Transmission Distance	≥3km
Dimensions (mm)	Emitter: 140x75x30 Receiver: 220x48x32 Kit: 143x50x262
Weight (g)	Emitter: 110 Receiver: 140 Kit: 400

LAN Cable Identifier Kit Contents	
Description	Quantity
Emitter Unit	1
Receiver Unit	1
Headphones	1
RJ11 to RJ11 Telephone Cable	1
RJ45 to RJ45 Network Cable	1
RJ11 to Crocodile Clip Cable	1
User Manual	1
Storage Bag	1

HDMI Cable Tester

Continuity and Sweep Tester

Part No. 157013

The HDMI Cable Tester enables you to perform continuity and sweep tests on HDMI Cable.

RJ45 Crimp Tool

Crimp Tool and Cutter

Part No. 157007

IDC Tool

Part No. 157008

CAT Cable Stripper

Part No. 157009

CAT 6 Plugs

Unshielded Plugs 8P8C

Part No. 156001

Suitable for 23 AWG
(Supplied in multiples of 100 units only)

Patch Panel

24 Port CAT6 Patch Panel 1U High

Part No. 157006

CAT 6 Patch Leads

250 MHz Stranded Copper 23 AWG

Part No. See Table

CAT6 Patch Leads	
GREY 0.5m	Part No. 157001
GREY 1.0m	Part No. 157002
GREY 1.5m	Part No. 157003
GREY 2.0m	Part No. 157004
GREY 3.0m	Part No. 157005
RED 0.5m	Part No. 157021
RED 1.0m	Part No. 157022
RED 1.5m	Part No. 157023
RED 2.0m	Part No. 157024
RED 3.0m	Part No. 157025
BLUE 0.5m	Part No. 157031
BLUE 1.0m	Part No. 157032
BLUE 1.5m	Part No. 157033
BLUE 2.0m	Part No. 157034
BLUE 3.0m	Part No. 157035
GREEN 0.5m	Part No. 157041
GREEN 1.0m	Part No. 157042
GREEN 1.5m	Part No. 157043
GREEN 2.0m	Part No. 157044
GREEN 3.0m	Part No. 157045
YELLOW 0.5m	Part No. 157051
YELLOW 1.0m	Part No. 157052
YELLOW 1.5m	Part No. 157053
YELLOW 2.0m	Part No. 157054
YELLOW 3.0m	Part No. 157055

HMX 1RCU

HDMI Matrix RCU

Part No. 310009

24V 6.25A PSU

Power Supply Unit

Part No. 310016

Used with:

HMX 8x8V (310003)

HMX 4x8V (310008)

HMX 4x4K (310004)

HMX RCU Lite

4x4L Remote Control Unit

Part No. 310022

24V 2.7A PSU

Power Supply Unit

Part No. 310025

Used with:

HMX 4 x 4L (310020)

5V 1.2A PSU

Power Supply Unit

Part No. 310018

Used with:
HDA 1x2S (310006)

5V 2.6A PSU

Power Supply Unit

Part No. 310023

Used with:
HES Lite TX and RX (310021)

5V 3A PSU

Power Supply Unit

Part No. 310019

Used with:
HDA 1x8S (310007)

24V 1.25A PSU

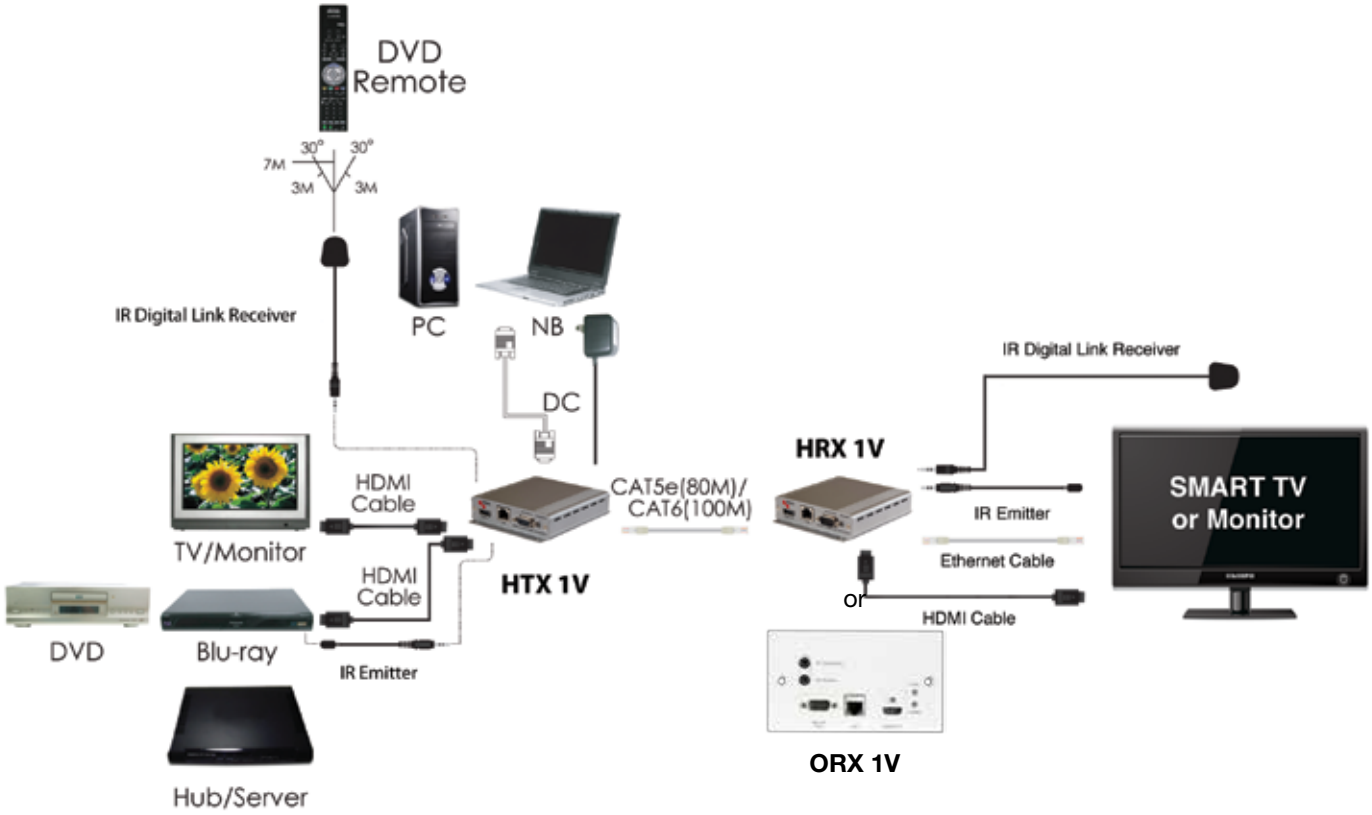
Power Supply Unit

Part No. 310017

Used with:
HTX 1V (310001)

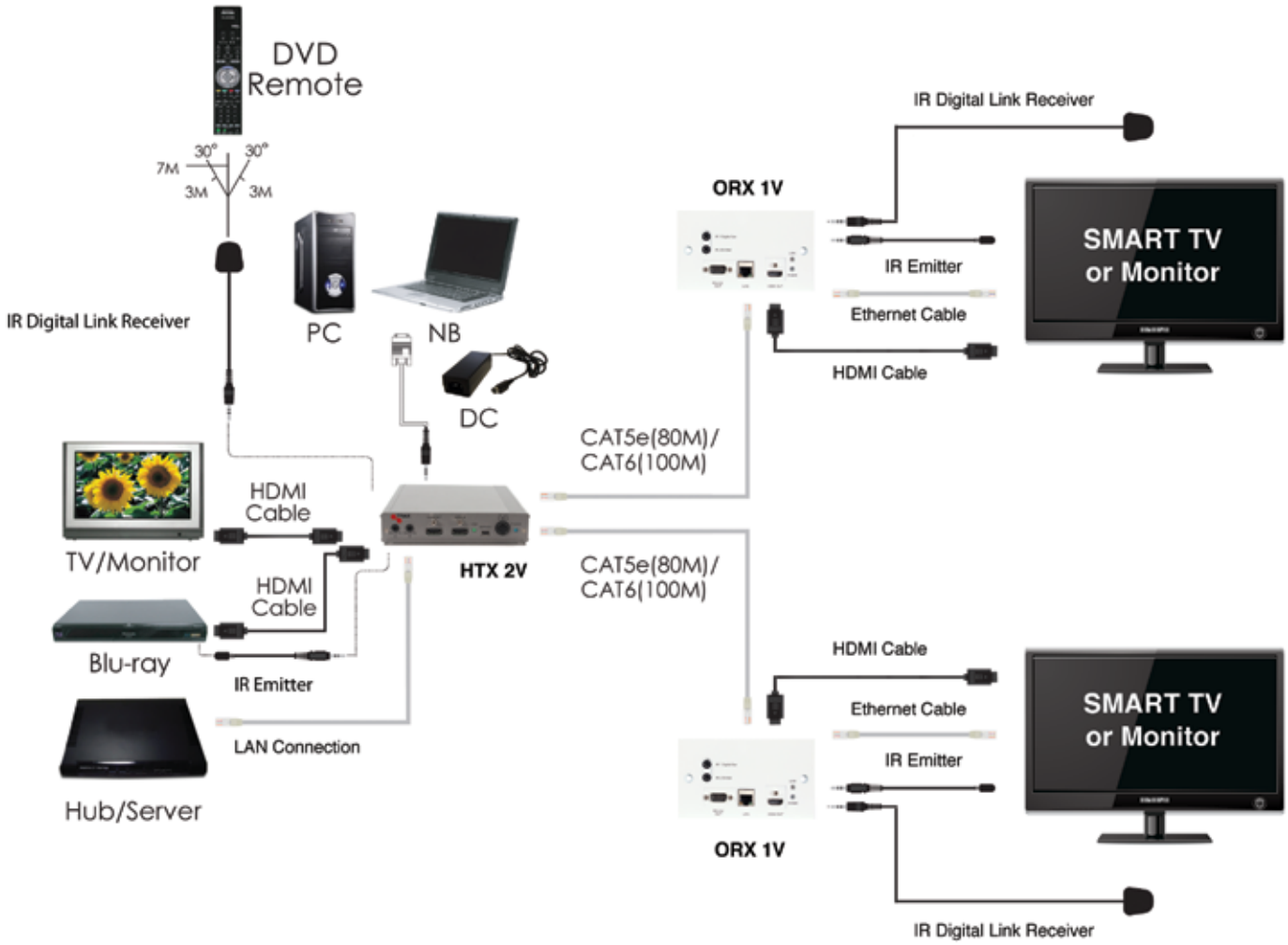
Connections and Installation

HTX 1V / HRX 1V, ORX 1V



Connections and Installation

HTX 2V

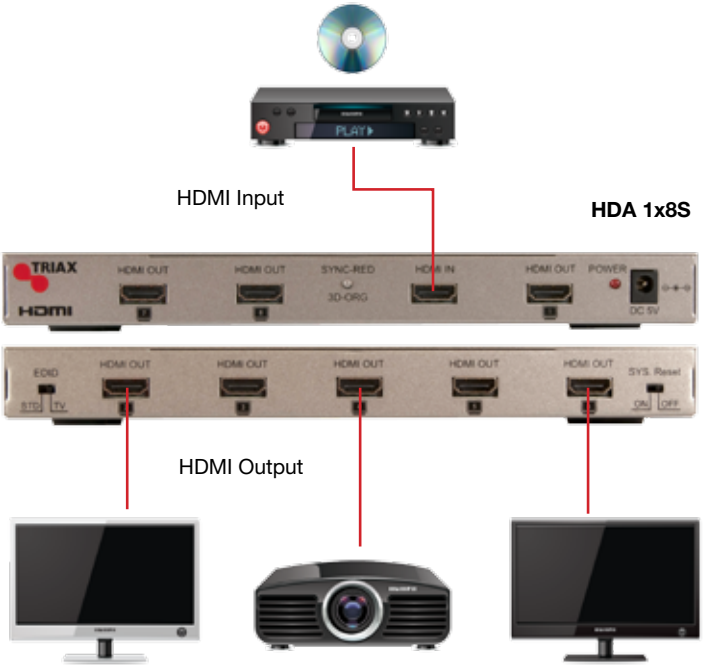


Connections and Installation

HDA 1x2S

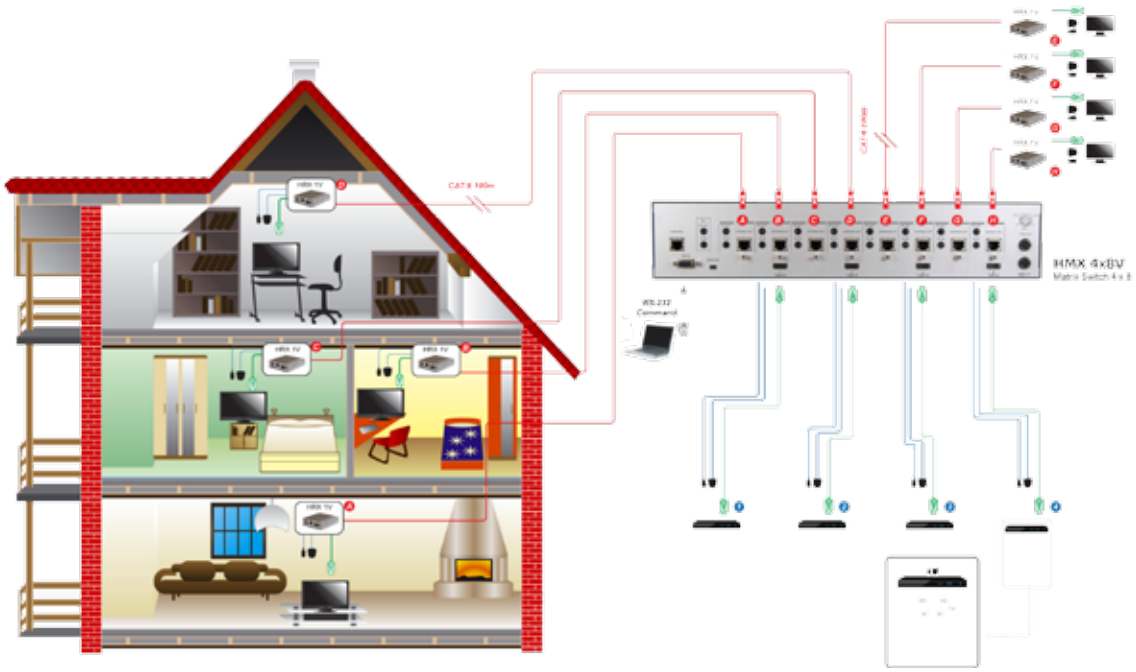
Connections and Installation

HDA 1x8S



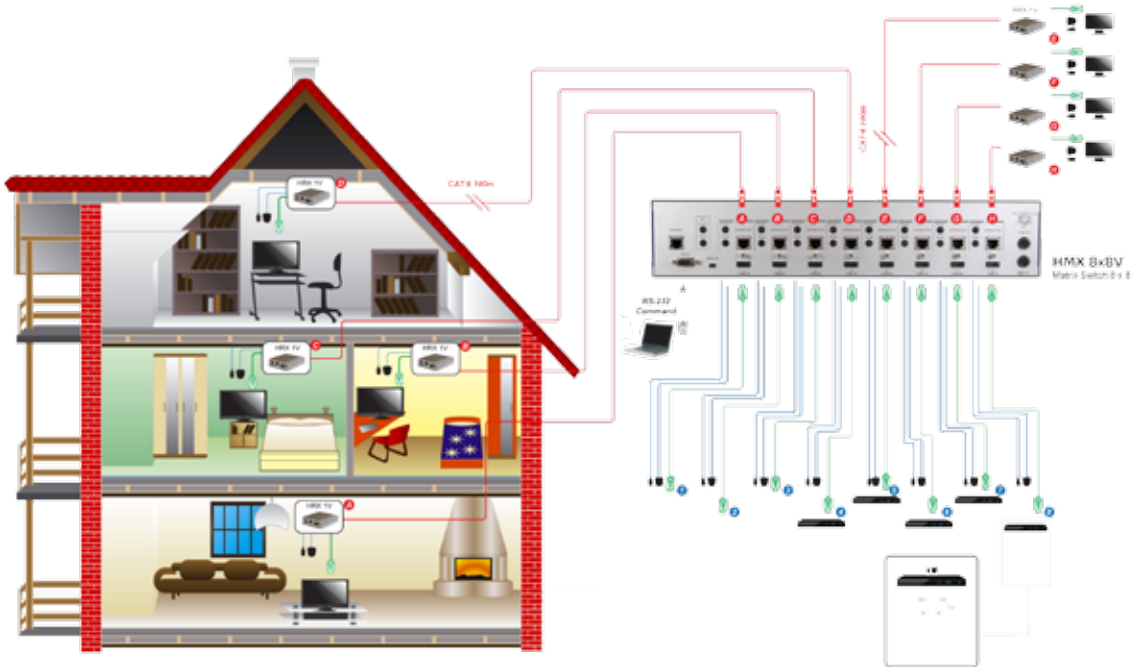
Connections and Installation

HMX 4x8V



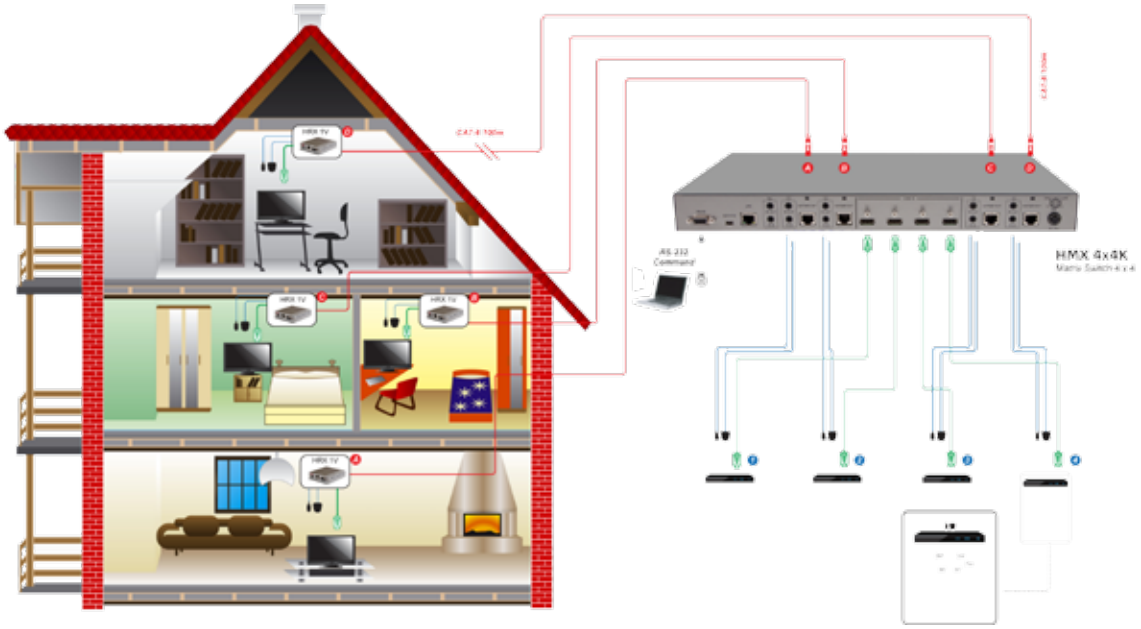
Connections and Installation

HMX 8x8V



Connections and Installation

HMX 4x4K



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